

Scientific Notes:

Further record of pre-imaginal stages of *Esperarge* (s.str.) *clymene* ssp. *valentinae* (Miller) from Van Province (East Turkey) (*Lepidoptera*, *Satyridae*)

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Within the field programs of the year 2008, the authors visited on 4th May, the southern remote territories of Çatak district, Amata valley, in Van Province (East Turkey).¹ The first author found a satyrid caterpillar on an unknown grass species (Fig.1) and bred in captivity under the room condition until pupation [23rd May] (Figs.2,3). A male butterfly emerged on 2nd June, 2008 (Figs.4,5). The species *Esperarge* (s.str.) *clymene* (Fabricius, 1787)² is referable to the subspecies *valentinae* (Miller, 1923), originally described from Kağızman District (Kars Prov.).

Early stages of this species were previously described by Hesselbarth et al. (1995)³ based upon the material obtained Kurubaş pass (Van) in 1985. Caterpillar and pupa of this species were illustrated on page 817 (figs.1 & 15). Our specimen is from southern territories of Çatak District, nearly 90 km far from Kurubaş (Map 1). Duration of the pupal stage is about 10 days. This is the second early-stages record of the species in Turkey.

The species ranges from Balkan States to West Asia. In Turkey, it is recorded from 32 provinces so far (Koçak & Kemal, 2006, 2007)⁴. The species is represented by the following

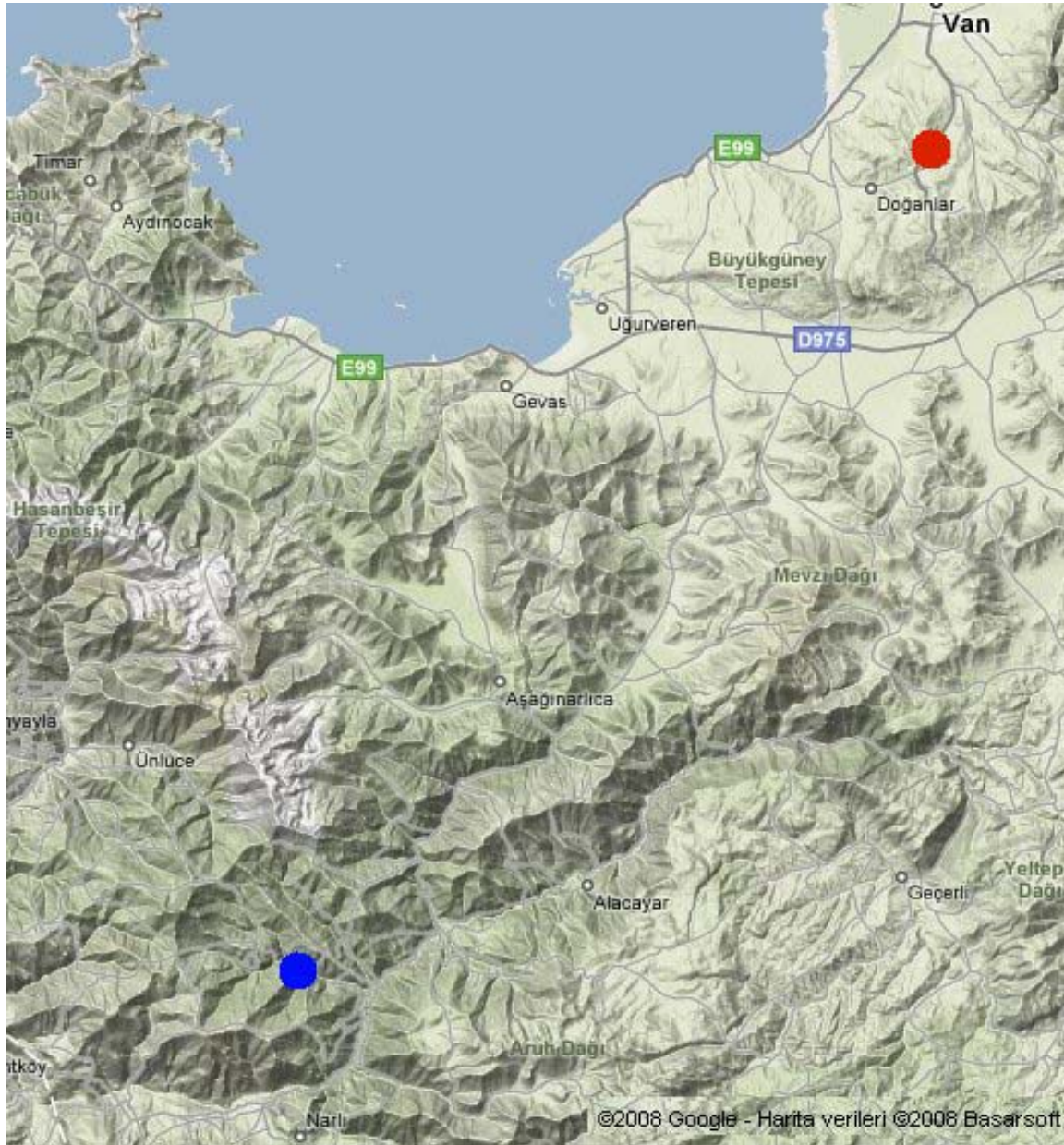
¹ For more information about the remote and dangerous areas of the East Turkey, including Çatak district, visit the official Web Page of the Turkish General Staff (TGS) in Turkish:
http://www.tsk.mil.tr/HABERLER/5_Terorle_Mucadele/terorle_mucadele_2008.htm

² The genus *Esperarge* was proposed by Nekrutenko in 1988 for [*Papilio*] *climene* Esper, [1783] (= *Papilio clymene* Fabricius, 1787), while the subgenus *Marginarge* by Korb in 2005 for the species *Hipparchia eversmanni* Eversmann, 1847.

³ Hesselbarth et al., 1995, Die Tagfalter der Türkei. Selbstverlag.

⁴ Koçak, A.Ö. & M. Kemal, 2006, Checklist of Lepidoptera of Turkey. Cent. ent. Stud., Priamus Suppl. 1: 1-196.

subspecies: *Ssp. clymene* Fabricius, 1787 in Balkans, South Russia and North West Turkey (Ankara: Beypazarı); *ssp. roxandra* Boisdual, 1848 in Caucasus (partly), Georgia and Azerbaidjan; *ssp. lecerfi* Koçak, 1980 in Iran (Fars, Elburz Mts.), northern Iraq, and *ssp. valentinae* Miller, 1923 in South, North-East and East Turkey, Caucasus (in part), Azerbaidjan (in part), and North West Iran.



Map 1- Localities of *Esperarge clymene* in Van Province, where its early stages studied. Red circle (Hesselbarth, 1995), blue circle (present information).



Fig. 1- Caterpillar of *Esperarge clymene* (Satyridae) on an unknown grass species, Turkey Van Prov., Çatak, Amata valley 1620m 4th May, 2008 M.Kemal leg. & photo (Cesa)



Fig. 2- 4th instar of caterpillar of *Esperarge clymene* (Satyridae) bred in captivity from Turkey on 9th May, 2008, Van Prov., Çatak, Amata valley 1620m photo M. Kemal (Cesa)



Fig. 3- Pupal skin of *Esperarge clymene* (Satyridae) after emerging the butterfly in captivity from Turkey Van Prov., Çatak, Amata valley 1620m photo M. Kemal (Cesa)



Fig. 4- Adult butterfly *Esperarge clymene* (Satyridae) emerged on 2nd June, 2008 in captivity from Turkey Van Prov., Çatak, Amata valley 1620m photo M. Kemal (Cesa)



Fig. 5- Adult butterfly *Esperarge clymene* (*Satyridae*) emerged on 2nd June, 2008 in captivity from Turkey Van Prov., Çatak, Amata valley 1620m photo M. Kemal (Cesa)

Diurnal *Lepidoptera* of Sarmaç village, Erek Mountain (Van Province, East Turkey)

Muhabbet Kemal Halil Özkol Lokman Kayci

Faunistical results of the recent visits of the authors to Erekdağı (Erek Mountain, Van Province) are listed below. The vicinity of the Sarmaç village, located on the northern slopes of Erek Mountain, between 1900-2200m above sea level, visited by the authors on 5th June 2007, 21st June 2007, and 3rd June 2008. Some species recorded during these trips, and the species of

the butterflies recorded by Kayci (2007) are listed.⁵ New records are marked with *. Totally 93 diurnal species of the Lepidoptera, belonging to 11 families, are reported below for the first time.



Fig. 1- General appearance of Erekdagi (Van Prov.) from Sarmaç village on 5th June 2007, photo M.Kemal (Cesa)



Fig. 2- Erekdagi (Van Prov.) from Sarmaç village on 5th June 2007, photo M.Kemal (Cesa)

⁵ Kayci, L., 2007. Ereğ Dağı (Van) Papilionoidea ve Hesperioidea Ekolojisi ve Faunası Üzerine Araştırmalar. *Cent. Ent. Stud. Priamus Suppl.* 6: 47.



Fig. 3- Erekdagi (Van Prov.) from Sarmaç village on 5th June 2007, photo M.Kemal (Cesa)



Fig. 4- Sarmaç village on 5th June 2007, photo M.Kemal (Cesa)



Fig. 5- Collecting locality at Erekdagi (Van Prov.), 2000-2100m on 5th June 2007, photo M.Kemal (Cesa)



Fig. 6- Author at collecting locality at Erekdagi (Van Prov.), 2000-2100m on 5th June 2007, photo M.Kemal (Cesa)



Fig. 7- Collecting locality at Erekdagi (Van Prov.), 2000-2100m on 5th June 2007, photo M.Kemal (Cesa)



Fig. 8- Author at collecting locality at Erekdagi (Van Prov.), 2000-2100m on 5th June 2007, photo M.Kemal (Cesa)



Fig. 9- *Centaurea urvillei* ssp. *nimrodii* (Asteraceae) at Erekdagi (Van Prov.), one of the most important nectar plant of especially *Satyridae* species (*Melanargia*, *Hyponphele* etc.), 5th June 2007, photo M.Kemal (Cesa)



Fig. 10- A *Sedum* species (Crassulaceae) growing on rocky places at Erekdagi (Van Prov.), on 5th June

2007, photo M.Kemal (Cesa)



Fig. 11- *Crataegus monogyna* (Rosaceae) at Erekdagi (Van Prov.), one of the most important larval plant of many moths and butterflies (*Aporia crataegi*) on 5th June 2007, photo M.Kemal (Cesa)



Fig. 12- Flowers of *Crataegus monogyna* (Rosaceae) at Erekdagi (Van Prov.) on 5th June 2007, photo M.Kemal (Cesa)



Fig. 13- A Cranefly (*Tipulidae*) resting inside of a *Crataegus* tree (*Rosaceae*) at Erekdagi (Van Prov.) on 5th June 2007, photo M.Kemal (Cesa)



Fig. 14- *Phyllomorpha laciniata* (*Coreidae*) one of the common species in the mountain steppe of Turkey. Erekdagi (Van Prov.) on 5th June 2007, photo M.Kemal (Cesa)



Fig. 15- Bendimahi Lizard (*Lacerta bendimahiensis*) (*Lacertidae*) a predator of butterflies at Erekdagi (Van Prov.) and an endemic species, confined to Van and Agri Provinces only, on 5th June 2007, photo M.Kemal (Cesa)



Fig. 16- *Melitaea fascelis* (*Argynnidae*) a resting female at Erekdagi (Van Prov.), on 21st June 2007, photo M.Kemal (Cesa)



Fig. 17- *Melitaea cinxia* (Argynnidae) a basking male at Erekdagi (Van Prov.), on 3rd June 2008, photo M.Kemal (Cesa)



Fig. 18- *Pseudochazara pelopea* ssp. *persica* (Satyridae) a male butterfly at Erekdagi (Van Prov.), 2100m, on 21st June 2007, photo M.Kemal (Cesa)



Fig. 19- *Lycaena (Thersamonia) kefersteinii* (Lycaenidae) a male butterfly at Erekdagi (Van Prov.), 2100m, on 3rd June 2007, photo M.Kemal (Cesa)

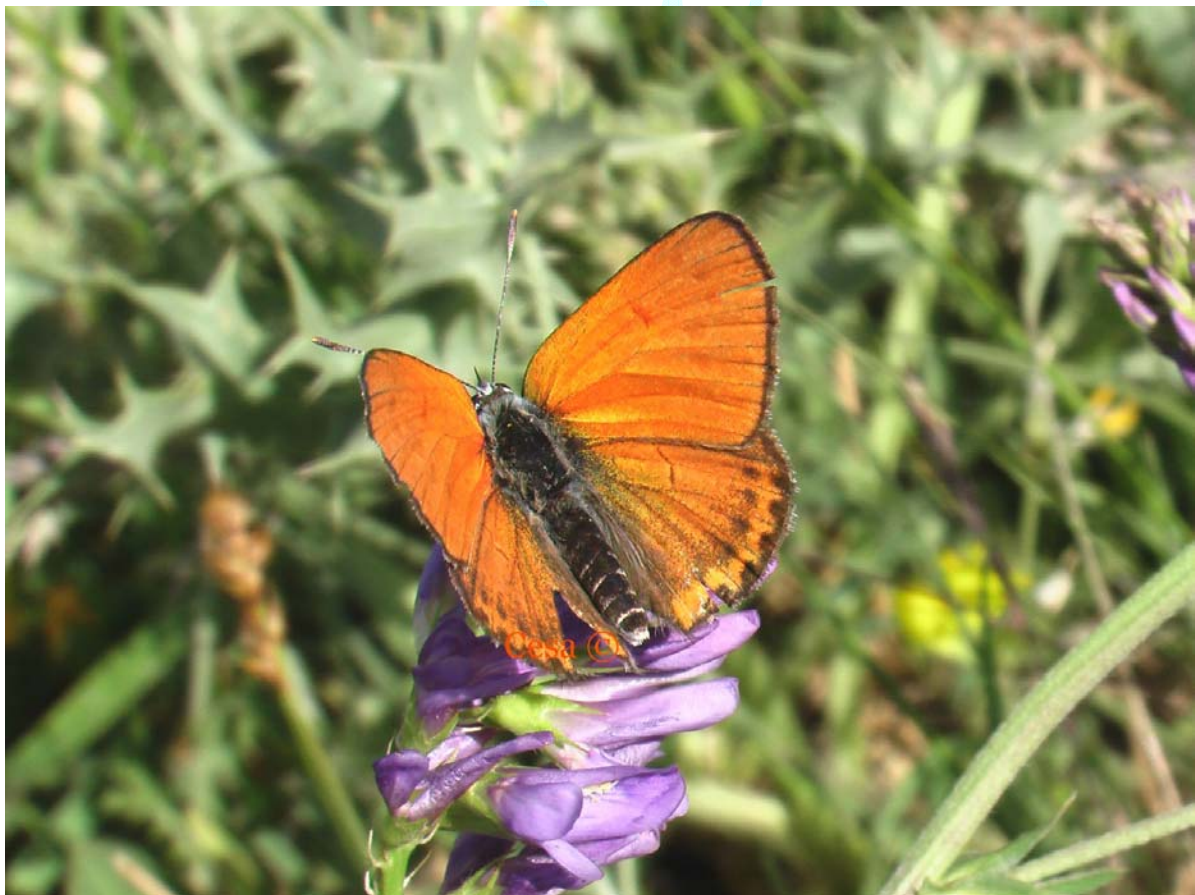


Fig. 20- *Lycaena (Thersamonia) kurdistanica* (Lycaenidae) a feeding male at Erekdagi (Van Prov.), 2100m, on 3rd June 2007, photo M.Kemal (Cesa)

List of the *Lepidoptera* Recorded at Sarmaç Village (Erek Mountain)

1. *Aglais urticae* (Linnaeus,1758) (Argynnidae)
2. *Argynnis (Pandoriana) pandora* ([Denis & Schiffermüller],1775) (Argynnidae)
3. *Brenthis hecate* ([Denis & Schiffermüller],1775) (Argynnidae)
4. *Cynthia cardui* (Linnaeus,1758) (Argynnidae)
5. *Issoria lathonia* (Linnaeus,1758) (Argynnidae)
6. *Melitaea (Cinclidia) (phoebe) phoebe* (Goeze,1779) (Argynnidae)
7. *Melitaea (Didymaeformis) didyma* (Esper,[1779]) (Argynnidae)
8. *Melitaea (Didymaeformis) fascelis* (Fabricius,1787) (Argynnidae) (Fig.16)
9. *Melitaea (Didymaeformis) perseae* Kollar,[1849] (Argynnidae)
10. *Melitaea (s.str.) cinxia* (Linnaeus,1758) (Argynnidae) (Fig.17)
11. *Polygonia (Comma) egea* (Cramer,[1775]) (Argynnidae)
12. *Aplocera plagiata* (Linnaeus,1758) (Geometridae)*
13. *Idaea rufaria* (Hübner,[1799]) (Geometridae)*
14. *Lythria cruentaria* (Hufnagel,1767) (Geometridae)*
15. *Rhodometra sacraria* (Linnaeus,1767) (Geometridae)*
16. *Rhodostrophia auctata* (Staudinger,1879) (Geometridae)*
17. *Scopula immistaria* (Herrich-Schäffer,[1852]) (Geometridae)*
18. *Tephрина murinaria* ([Denis & Schiffermüller],1775) (Geometridae)*
19. *Carcharodus (s.str.) alceae* (Esper,[1780]) (Hesperiidae)
20. *Hesperia comma* (Linnaeus,1758) (Hesperiidae)
21. *Pyrgus melotis* (Duponchel,[1834]) (Hesperiidae)
22. *Pyrgus serratulae* (Rambur,[1839]) (Hesperiidae)
23. *Pyrgus sidae* (Esper,[1784]) (Hesperiidae)
24. *Spialia (Neospialia) orbifer* (Hübner,[1823]) (Hesperiidae)
25. *Thymelicus sylvestris* (Poda,1761) (Hesperiidae)
26. *Callophrys mystaphia* Miller,1913 (Lycaenidae)*
27. *Callophrys suaveola* (Staudinger,1881) (Lycaenidae)
28. *Cupido (s.str.) osiris* (Meigen,[1829]) (Lycaenidae)
29. *Glaucopteryx (s.str.) alexis* (Poda,1761) (Lycaenidae)
30. *Lycaena (Alciphronia) alciphron* (Rottemburg,1775) (Lycaenidae)
31. *Lycaena (Thersamonia) asabinus* (Gerhard,[1850]) (Lycaenidae)
32. *Lycaena (Thersamonia) kefersteinii* (Gerhard,[1850]) (Lycaenidae) (Fig.19)
33. *Lycaena (Thersamonia) kurdistanica* (Riley,1921) (Lycaenidae) (Fig.20)
34. *Lycaena (Thersamonia) thetis* (Klug,1834) (Lycaenidae)
35. *Lycaena (s.str.) phlaeas* (Linnaeus,1761) (Lycaenidae)
36. *Plebejus (Kretania) carmon* (Gerhard,[1851]) (Lycaenidae)
37. *Plebejus (Plebejides) zephyrinus* (Christoph,1884) (Lycaenidae)
38. *Plebejus (s.str.) argus* (Linnaeus,1758) (Lycaenidae)
39. *Polyommatus (Albulina (Plebejidea)) loewii* (Zeller,1847) (Lycaenidae)
40. *Polyommatus (Albulina (Vacciniina)) alcedo* (Christoph,1877) (Lycaenidae)
41. *Polyommatus (Aricia (s.str.)) agestis* ([Denis & Schiffermüller],1775) (Lycaenidae)
42. *Polyommatus (s.str. (Agrodiaetus (Antidolus))) kurdistanicus* (Forster,1961) (Lycaenidae)
43. *Polyommatus (s.str. (Agrodiaetus (Antidolus))) menalcas* (Freyer,[1837]) (Lycaenidae)
44. *Polyommatus (s.str. (Agrodiaetus (Phyllisia))) vanensis* (De Lesse,1957) (Lycaenidae)
45. *Polyommatus (s.str. (Agrodiaetus (Transcaspicus))) huberti* (Carbonell,1993) (Lycaenidae)
46. *Polyommatus (s.str. (Agrodiaetus (Xerxesia))) cyaneus* (Staudinger,1899) (Lycaenidae)
47. *Polyommatus (s.str. (Lysandra)) bellargus* (Rottemburg,1775) (Lycaenidae)
48. *Polyommatus (s.str. (Lysandra)) corydonius* (Herrich-Schäffer,[1852]) (Lycaenidae)
49. *Polyommatus (s.str. (Meleageria)) daphnis* ([Denis & Schiffermüller],1775) (Lycaenidae)
50. *Polyommatus (s.str. (Plebicula)) amandus* (Schneider,1792) (Lycaenidae)
51. *Polyommatus (s.str. (Thersitesia)) thersites* (Canterer,[1835]) (Lycaenidae)

52. ***Polyommatus (s.str.) icarus* (Rottemburg,1775) (Lycaenidae)**
53. ***Pseudophilotes vicrama* (Moore,1865) (Lycaenidae)**
54. ***Satyrium (Nordmannia) abdominalis* (Gerhard,[1850]) (Lycaenidae)**
55. ***Tomares desinens* Nekrutenko & Effendi,1980 (Lycaenidae)**
56. ***Agrotis (s.str.) ipsilon* (Hufnagel,1766) (Noctuidae)***
57. ***Autographa gamma* (Linnaeus,1758) (Noctuidae)***
58. ***Emmelia trabealis* (Scopoli,1763) (Noctuidae)***
59. ***Xylena exsoleta* (Linnaeus,1758) (Noctuidae)**
60. ***Archon apollinaris* (Staudinger,[1892]) (Papilionidae)**
61. ***Parnassius (Driopa) mnemosyne* (Linnaeus,1758) (Papilionidae)**
62. ***Anthocharis cardamines* (Linnaeus,1758) (Pieridae)**
63. ***Anthocharis damone* Boisduval,1836 (Pieridae)**
64. ***Anthocharis gruneri* Herrich-Schäffer,[1851] (Pieridae)**
65. ***Aporia (s.str.) crataegi* (Linnaeus,1758) (Pieridae)**
66. ***Colias (Eriocolias) crocea* (Fourcroy,1785) (Pieridae)**
67. ***Gonepteryx (s.str.) rhamni* (Linnaeus,1758) (Pieridae)**
68. ***Leptidea duponcheli* (Staudinger,1871) (Pieridae)**
69. ***Pieris (Artogeia) ergane* (Geyer,[1828]) (Pieridae)**
70. ***Pieris (Artogeia) leucosoma* Schawerda,1905 (Pieridae)**
71. ***Pontia chloridice* (Hübner,[1813]) (Pieridae)**
72. ***Pontia edusa* (Fabricius,1777) (Pieridae)**
73. ***Chrysocrambus linetellus* (Fabricius,1781) (Pyrilidae)***
74. ***Nomophila noctuella* ([Denis & Schifferrmüller],1775) (Pyrilidae)***
75. ***Pyrausta (Haematia) despicata* (Scopoli,1763) (Pyrilidae)***
76. ***Synaphe moldavica* (Esper,[1789]) (Pyrilidae)***
77. ***Udea ferrugalis* (Hübner,1796) (Pyrilidae)***
78. ***Arethusana arethusa* ([Denis & Schifferrmüller],1775) (Satyridae)**
79. ***Chazara (Neochazara) anthe* (Hoffmannsegg,1804) (Satyridae)**
80. ***Chazara (s.str.) briseis* (Linnaeus,1764) (Satyridae)**
81. ***Coenonympha (s.str.) pamphilus* (Linnaeus,1758) (Satyridae)**
82. ***Esperarge (s.str.) clymene* (Fabricius,1787) (Satyridae) [see previous article in this issue]**
83. ***Hyponephele (s.str. (Ereminephele)) naricoides* Gross,1977 (Satyridae)**
84. ***Hyponephele (s.str.) lupina* (Costa,[1836]) (Satyridae)**
85. ***Hyponephele (s.str.) lycaon* (Rottemburg,1775) (Satyridae)**
86. ***Lasiommata maera* (Linnaeus,1758) (Satyridae)**
87. ***Maniola (s.str.) jurtina* (Linnaeus,1758) (Satyridae)**
88. ***Melanargia (Turcargia) hylata* (Ménétriés,1832) (Satyridae)**
89. ***Pseudochazara (s.str.) geyeri* (Herrich-Schäffer,[1846]) (Satyridae)**
90. ***Pseudochazara (s.str.) pelopea* (Klug,1832) (Satyridae) (Fig.18)**
91. ***Satyrus (s.str.(s.str.)) favonius* Staudinger,[1892] (Satyridae)**
92. ***Hemaris (Cochrania) croatica* (Esper,[1779]) (Sphingidae)***
93. ***Fulvoclysia subdolana* (Kennel,1901) (Tortricidae)***



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